

EXHIBIT X:

Claim Chart for the ‘891 Patent

Eureka Aerospace High Powered Electromagnetic System, or HPEMS	Patent #: RE 43,891; Independent Claim 11	Patent #: RE 43,891; Dependent Claims
<p>The U.S. Air Force request for an "air-delivered capability to disable moving ground vehicles while minimizing harm to occupants." Presumably the Air Force wants to look beyond helicopter-mounted snipers, and so Eureka Aerospace's device could potentially fit the bill. The U.S. Marines have lined up as possible customers. The idea is that an electromagnetic pulse (from a remote location) would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. Boeings; as partner provided funds for research.</p>	<p>A vehicle adapted for receipt of a signal from a remote location to control the vehicle's stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>
<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse (from a remote location) would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>

<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>

<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>

<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
<p>"In an attempt to put an end to dangerous, high-speed police chases, scientists at Eureka Aerospace have developed an electromagnetic pulse gun called the High Power Electromagnetic System, or HPEMS</p>	<p>wherein the at least one control signal is sent due to unauthorized use of the vehicle, and wherein an originating first signal that eventually causes the at least one control signal to be sent is generated upon initial verification of the unauthorized use of the vehicle;</p>	<p>21. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means is designed to be used with or without biometrics for authentication and identification, thereby allowing access to the product by authorized, trained and equipped individuals and preventing access to the products by unauthorized, untrained, and unequipped individuals.</p>

<p>The High Powered Electromagnetic System, or HPEMS develops a high-intensity directed pulse of electricity designed to disable a car's microprocessor system, shutting down all of its systems. The idea is that an electromagnetic pulse would be used to disable a car's microprocessors, chips, and whatever other electronics are keeping it running. The disabling power only works for more modern cars that rely upon microprocessors and various electronics for their engine, as opposed to pre-1970s cars.</p>	<p>at least one mobile, portable, or fixed device capable of sending the at least one control signal from the remote location that is of electromagnetic pulse, electrostatic discharge, microwave beam or radio frequency, to disable the computer, electrical, fuel and air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to the brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and horsepower of the motor.</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

Laser Weapons System (LaWS)	Patent #: RE 43,891; Independent Claim 11	Patent #: RE 43,891; Dependent Claims
<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>A vehicle adapted for receipt of a signal from a remote location to control the vehicle's stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>
--	--	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	--	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>wherein the at least one control signal is sent due to unauthorized use of the vehicle, and wherein an originating first signal that eventually causes the at least one control signal to be sent is generated upon initial verification of the unauthorized use of the vehicle;</p>	<p>21. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means is designed to be used with or without biometrics for authentication and identification, thereby allowing access to the product by authorized, trained and equipped individuals and preventing access to the products by unauthorized, untrained, and unequipped individuals.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). In 2010, Kratos Defense & Security Solutions was awarded an 11-million-dollar contract to support the Naval Surface Warfare Center (NSWC) in the development of the Laser Weapons System (LaWS) for the U.S. Navy's Directed Energy and Electric Weapon Systems (DE&EWS) program. The LaWS is designed to fry sensors, burn out motors, and detonate explosive materials. Against small UAVs (vehicle), one can be shot down two seconds. When facing small boats (vehicle), the laser targets a craft's motor to disable it. US Navy officers are testing onboard the USS Ponce, this drone (vehicle) killing laser. When the laser makes contact with a drone, the vehicle heats to a temperature of more than 1,000°F and explodes. The laser will be used to destroy aircraft (vehicle) and small boats (vehicle). The \$40 million laser moves at the speed of light. Laser canons are limited only by the amount of electricity that can be generated. It operates in an electromagnetic spectrum so you don't see the beam, it doesn't make any sound, and it's completely silent.</p>	<p>at least one mobile, portable, or fixed device capable of sending the at least one control signal from the remote location that is of electromagnetic pulse, electrostatic discharge, microwave beam or radio frequency, to disable the computer, electrical, fuel and air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to the brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and horsepower of the motor.</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

ATHENA (Advanced Test High Energy Asset)	Patent #: RE 43,891; Independent Claim 11	Patent #: RE 43,891; Dependent Claims
<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>A vehicle adapted for receipt of a signal from a remote location to control the vehicle's stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>
--	--	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	--	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>wherein the at least one control signal is sent due to unauthorized use of the vehicle, and wherein an originating first signal that eventually causes the at least one control signal to be sent is generated upon initial verification of the unauthorized use of the vehicle;</p>	<p>21. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means is designed to be used with or without biometrics for authentication and identification, thereby allowing access to the product by authorized, trained and equipped individuals and preventing access to the products by unauthorized, untrained, and unequipped individuals.</p>
--	---	---

<p>A vehicle adapted (e.g. small boats, drones, aircraft, UAVs). Lockheed Martin is providing the U.S. military with laser weapons capable of 30 KW beams, according to three Lockheed executives in an interview with Defense News. Lockheed Martin's ATHENA (Advanced Test High Energy Asset) lasers can disable a truck's engine from over a mile away with only 30 KW of power. ATHENA is an advancement of the company's ADAM (Area Defense Anti-Munitions) laser weapon system, which successfully disabled two boats about a mile away. Lockheed Martin's Air Defense Anti-Munitions (ADAM) has weathered several tests destroying incoming rockets. They can counter rockets, artillery and mortars, and land, sea and air vehicles, including small drones with permanent damage to electronics and computer systems within the target. They can cause varying degrees of damage, by shooting a plane from the sky or destroying a truck engine. Lockheed Martin's ATHENA laser weapon system defeats a truck target by disabling the engine.</p>	<p>at least one mobile, portable, or fixed device capable of sending the at least one control signal from the remote location that is of electromagnetic pulse, electrostatic discharge, microwave beam or radio frequency, to disable the computer, electrical, fuel and air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to the brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and horsepower of the motor.</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
--	---	---

Counter-Electronics High-Powered Microwave Advanced Missile Project (CHAMP)	Patent #: RE 43,891; Independent Claim 11	Patent #: RE 43,891; Dependent Claims
<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>A vehicle adapted for receipt of a signal from a remote location to control the vehicle's stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>
---	--	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	---	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	---	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	---	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	---	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	--	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>wherein the at least one control signal is sent due to unauthorized use of the vehicle, and wherein an originating first signal that eventually causes the at least one control signal to be sent is generated upon initial verification of the unauthorized use of the vehicle;</p>	<p>21. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means is designed to be used with or without biometrics for authentication and identification, thereby allowing access to the product by authorized, trained and equipped individuals and preventing access to the products by unauthorized, untrained, and unequipped individuals.</p>
---	---	---

<p>A vehicle adapted (e.g. cars, trucks, small boats, drones, aircraft, UAVs). Boeing successfully tested the electromagnetic pulse; Counter-electronics High-powered Microwave Advanced Missile Project (CHAMP). CHAMP's High Power Microwave instrument that provided the disabling EMP blast is a product of Raytheon Ktech. In 2012, it was reported that a CHAMP mission in Utah managed to hit and subsequently disable seven separate targets in one mission, effectively knocking out the target's data and electronic subsystems. A recent solicitation from the Pentagon calls for a non-explosive electromagnetic pulse artillery shell capable of wiping out 'a wide range of electronics, critical infrastructure, and computer-based systems. Raytheon first revealed the project during a media roundtable in Washington. It boasted the device is effective against drone swarms over a wide area, and has been proven to stop cars and vehicles and could even throw off missiles guided by electronics.</p>	<p>at least one mobile, portable, or fixed device capable of sending the at least one control signal from the remote location that is of electromagnetic pulse, electrostatic discharge, microwave beam or radio frequency, to disable the computer, electrical, fuel and air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to the brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and horsepower of the motor.</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	---	---

Northrop Grumman X-47B UCAS X-47B Control Display Unit (CDU)	Patent #: RE 43,891; Independent Claim 11	Patent #: RE 43,891; Dependent Claims
<p>The U.S. Navy's UCAS-D program is designed to demonstrate the ability of a, fighter-sized unmanned aircraft to land on and be launched from the flight deck of a Navy aircraft carrier underway at sea.</p> <p>Northrop Grumman Corporation (NYSE: NOC), a leader in unmanned systems, serves as the Navy's prime contractor for the UCAS-D program, which is managed by U.S. Naval Air Systems Command (NAVAIR). Under contract awarded in Aug. 2007, Northrop Grumman designed the X-47B. From a remote place the X-47B Control Display Unit controls the aircraft's stall, stop, and slowdown means.</p>	<p>A vehicle adapted for receipt of a signal from a remote location to control the vehicle's stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>
<p>When the Unmanned X-47B aircraft gets on board an aircraft carrier, it's going to be controlled by a "mouse click," Pamiljans says. The click of a mouse will turn on the engines. Another will get it to taxi. Keep clicking, and the plane will "take off and come home." No joysticks and no pilot controlling it from a metal box somewhere. Just push-button operations and 3.4 million lines of software code and functionality to control the X-47B.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>19. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means both have the ability to slowdown or stall the vehicle naturally and without any action on the brakes, door locks, or steering wheel, and both have the ability to slowdown or stall the vehicle through unnatural means where there may be action on the brakes, door locks, and steering for navigation to a safe stop.</p>

<p>The X-47B Smart, Autonomous Air System, is a computer-controlled unmanned aircraft system that takes off, flies a preprogrammed mission, and then returns to base in response to mouse clicks from its mission operator. The mission operator monitors the X-47B air vehicle's operation, but does not actively "fly" it via remote control as is the case for other unmanned systems currently in operation.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>The X-47B is fully autonomous in flight, relying on computer programs to tell it where it needs to go unless a mission operator needs to step in. That differs from other drones used by the military, which are more often piloted from remote locations.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>Nov. 2012: Is the completion date of the shore-based testing of a wireless, handheld X-47B Control Display Unit (used for precision deck handling of X-47B). Northrop Grumman test pilots, Dave Lorenz, and Bruce McFadden, launched the new X-47B off the nuclear aircraft carrier USS George H.W. Bush off the coast of Virginia. They issued orders to the autonomous drone using their forearm-mounted Control Display Units. The Control Display Unit (CDU), is used to control the X-47B's engine thrust to roll the aircraft forward, brake and stop, and use its nose wheel steering to execute the tight, precision turns required to maneuver.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
<p>Nov. 2012: Is the completion date of the shore-based testing of a wireless, handheld X-47B Control Display Unit (used for precision deck handling of X-47B). Northrop Grumman test pilots, Dave Lorenz, and Bruce McFadden, launched the new X-47B off the nuclear aircraft carrier USS George H.W. Bush off the coast of Virginia. They issued orders to the autonomous drone using their forearm-mounted Control Display Units. The Control Display Unit (CDU), is used to control the X-47B's engine thrust to roll the aircraft forward, brake and stop, and use its nose wheel steering to execute the tight, precision turns required to maneuver.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a remote location to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>

<p>Nov. 2012: Is the completion date of the shore-based testing of a wireless, handheld X-47B Control Display Unit (used for precision deck handling of X-47B). Northrop Grumman test pilots, Dave Lorenz, and Bruce McFadden, launched the new X-47B off the nuclear aircraft carrier USS George H.W. Bush off the coast of Virginia. They issued orders to the autonomous drone using their forearm-mounted Control Display Units. The Control Display Unit (CDU), is used to control the X-47B's engine thrust to roll the aircraft forward, brake and stop, and use its nose wheel steering to execute the tight, precision turns required to maneuver.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>
---	--	---

<p>Milstar II satellites will benefit from a Northrop Grumman-developed digital processing subsystem that delivers data 640 times faster than Milstar I payloads. The digital processing subsystem, combined with the RF subsystem built by Boeing Satellite Systems, constitutes the medium data rate (MDR) payload electronics package. The MDR payload is tailored to meet the needs of third world threats and regional conflicts.</p> <p>Flexible onboard processing instantly reconfigures networks to suit evolving command and control requirements. The use of EHF frequencies and highly directional nulling antennas reduce the probability of jamming and intercept. Lightweight portable terminals on land, sea, and in the air can be easily moved during tactical operations.</p>	<p>wherein the at least one control signal is sent due to unauthorized use of the vehicle, and wherein an originating first signal that eventually causes the at least one control signal to be sent is generated upon initial verification of the unauthorized use of the vehicle;</p>	<p>21. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means is designed to be used with or without biometrics for authentication and identification, thereby allowing access to the product by authorized, trained and equipped individuals and preventing access to the products by unauthorized, untrained, and unequipped individuals.</p>
<p>The Control Display Unit (CDU), is used to control the X-47B's engine thrust to roll the aircraft forward, brake and stop. Taxi controllers will have display units mounted on their arms that send radio frequencies to direct the plane across the decks.</p>	<p>at least one mobile, portable, or fixed device capable of sending the at least one control signal from the remote location that is of electromagnet pulse, electrostatic discharge, microwave beam or radio frequency, to disable the computer, electrical, fuel and air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to the brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and horsepower of the motor.</p>	<p>15. The stall-to-stop disabling and slowdown system [of claim 11] wherein the disabling and slowdown means activation engages the computer, electrical, fuel, and/or air systems of the vehicle or a combination of the computer, electrical, fuel and air systems that include but are not limited to vehicle brakes, foot peddle, lights, speed controls, ignition, steering, transmission, and the horsepower of the motor.</p>

Boeing MH-6 Little Bird Helicopter	Patent #: RE 43,891; Independent Claim 23	Patent #: RE 43,891; Dependent Claims
<p>Navy engineers have developed a Carbon Monoxide Sensor package that can turn any helicopter with a digital flight control system into an autonomous cargo delivery robot. The system is called the autonomous aerial cargo/utility system, or AACUS; a 20-year-old lance corporal was able to land a full-size Aurora Flight Services Little Bird helicopter by simply touching a map application on a handheld tablet computer</p>	<p>A vehicle adapted for receipt of a signal from a pre-programmed automated system to control the vehicles' stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>55. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle designed to perform as a driverless or autonomous vehicle for stopping or slowing a vehicle that is in operation with or without a user, driver or operator inside the vehicle.</p>
<p>We implemented the emergency maneuver trajectories to ensure the safety of the autonomous Unmanned Little Bird Helicopter, equipped with a large field of view range sensors. The dynamic constraints of the helicopter are given. Given these constraints we approximate five hundred trajectories each forming a positive control invariant set.</p>	<p>at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>The Aurora Flight Services Little Bird helicopter's electrical system serves many electrical sub-systems. It is used to safely power avionics, store electrical energy with which to power up the engine, operate actuators, and power internal and external lights, fans, etc. Autonomous control systems for unmanned aerial vehicles eliminate the need for an operator by substituting intelligent control software and electronics.</p>	<p>an electrical system in electrical communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>Emergency maneuver takes the system out of an undesired configuration. (a) Since we run the experiment with a gradient based optimizer. This lies in a local minimum between two walls of the grand canyon (b) The system follows this path since the future point is safe (c) The future point is no longer safe and an emergency maneuver is selected (d) The optimizer is now in a configuration where it can find a safe path again.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>The Aurora Flight Services Little Bird helicopter's electrical system serves many electrical sub-systems. It is used to safely power avionics, store electrical energy with which to power up the engine, operate actuators, and power internal and external lights, fans, etc. Autonomous control systems for unmanned aerial vehicles eliminate the need for an operator by substituting intelligent control software and electronics. An electrical receiver is the part in a complete circuit that receives the electrical energy</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>Emergency maneuver takes the system out of an undesired configuration. (a) Since we run the experiment with a gradient based optimizer. This lies in a local minimum between two walls of the grand canyon (b) The system follows this path since the future point is safe (c) The future point is no longer safe and an emergency maneuver is selected (d) The optimizer is now in a configuration where it can find a safe path again.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal from a pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means to stall or slow down the vehicle; and</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>The Aurora Flight Services Little Bird helicopter's electrical system serves many electrical sub-systems. It is used to safely power avionics, store electrical energy with which to power up the engine, operate actuators, and power internal and external lights, fans, etc. Autonomous control systems for unmanned aerial vehicles eliminate the need for an operator by substituting intelligent control software and electronics. An electrical receiver is the part in a complete circuit that receives the electrical energy</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the radar, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>The Aurora Flight Services Little Bird helicopter's electrical system serves many electrical sub-systems. It is used to safely power avionics, store electrical energy with which to power up the engine, operate actuators, and power internal and external lights, fans, etc. Autonomous control systems for unmanned aerial vehicles eliminate the need for an operator by substituting intelligent control software and electronics. An electrical receiver is the part in a complete circuit that receives the electrical energy</p>	<p>wherein the receivers, the computer system, and the electrical system are part of at least one pre-programmed operating system of unintended acceleration, pre-crash, reverse acceleration, stabilization, lane departure, cruise control, driverless vehicle, and chemical biological radiological nuclear explosive (CBRNE) detection;</p>	<p>31. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means; when the vehicle is in forward movement, backward or reverse movement, side movement, cruise control movement, or lane departure movement or when the vehicle moves outside a designated perimeter or zone.</p>

<p>We implemented the emergency maneuver trajectories to ensure the safety of the autonomous Unmanned Little Bird Helicopter, equipped with a large field of view range sensors. The dynamic constraints of the helicopter are given. Given these constraints we approximate five hundred trajectories each forming a positive control invariant set. The emergency maneuver library rescues the helicopter and immediately takes the system out of an undesired configuration.</p>	<p>wherein the control signal to activate the stall-to-stop or vehicle slowdown is not remote from the vehicle and the signal to activate is initiated when at least one of the vehicle's operating systems for monitoring the vehicle's condition exceeds a pre-programmed vehicle operating system parameter.</p>	<p>30. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means; when there is an in-vehicle notification warning of: crash, vehicle parking, speeding; driving too fast for conditions; construction zone; school zone; accident ahead; brake failure; acceleration/deceleration failure; acceleration/deceleration cruise control.</p>
---	---	---

"K-Max Self-flying Helicopter	Patent #: RE 43,891; Independent Claim 44	Patent #: RE 43,891; Dependent Claims
<p>The K-MAX self-flying vehicle can be flown by a human sitting in the cockpit, but it cannot be completely remotely piloted; someone on ground controlling everything the helicopter does. A ground controller can, however, use satellite communication and a laptop to change the mission at any point during flight. Retrofitted Device: Autonomous Aerial Cargo/Utility System (AACUS)</p>	<p>A vehicles' stall-to-stop system or vehicle slowdown system in signal communication with a pre-programmed automated system is adapted, modified, or designed to control the vehicles' stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>55. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle designed to perform as a driverless or autonomous vehicle for stopping or slowing a vehicle that is in operation with or without a user, driver or operator inside the vehicle.</p>
<p>NASA has identified LIDAR as a key technology for enabling autonomous precision safe landing of future robotic and crewed lunar-landing vehicles. Lidar sensors that are mounted on mobile platforms such as airplanes. Components to a LIDAR system: Laser 2-Scanner and optics 3- Photodetector and receiver electronics 4-Position and navigation systems</p>	<p>an electrical system in electrical communication with at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>45. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a global positioning system (GPS) receiver adapted for communication with at least one satellite.</p>
<p>K-max is equipped with Autonomous Aerial Cargo/Utility System (AACUS) technology, which combines advanced algorithms with LIDAR. Lidar uses ultraviolet, visible, or near infrared light to image objects. LIDAR instruments fitted to aircraft and satellites carry out surveying and mapping.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>48. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle system designed to perform as a pre-crash system for stopping or slowing a vehicle to prevent a crash.</p>

<p>NASA has identified LIDAR as a key technology for enabling autonomous precision safe landing of future robotic and crewed lunar-landing vehicles. Lidar sensors that are mounted on mobile platforms such as airplanes. Components to a LIDAR system: Laser 2-Scanner and optics 3- Photodetector and receiver electronics 4-Position and navigation systems</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means</p>	<p>45. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a global positioning system (GPS) receiver adapted for communication with at least one satellite.</p>
<p>K-max is equipped with Autonomous Aerial Cargo/Utility System (AACUS) technology, which combines advanced algorithms with LIDAR. Lidar uses ultraviolet, visible, or near infrared light to image objects. LIDAR instruments fitted to aircraft and satellites carry out surveying and mapping. Lockheed tossed in actuators to physically move the controls in response to electronic commands and added mission computers to tell them what to do, and a 3D imaging system to look out for suitable landing spots.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal in response to one of the vehicle's operating systems for monitoring the vehicle's condition upon exceeding a pre-programmed vehicle operating system parameter from the pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means such that the speed of the vehicle is initially decreased immediately after activation of the means upon initial receipt of the at least one control signal; and</p>	<p>53. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle system designed to perform as an adjusted cruise control system for stopping or slowing a vehicle to prevent a crash.</p>

<p>Lockheed Martin OPTIMUS technology aboard a K-MAX unmanned helicopter showcased its autonomous capabilities in March 2014 as part of the Office of Naval Research Autonomous Aerial Cargo/Utility System (AACUS). During the demonstration, an active duty Marine interfaced with the mission system's handheld flight control device to complete a resupply mission. The system successfully planned, routed and executed the mission without user input.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the radar, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor.</p>	<p>52. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle system designed to perform as a remote vehicle slowdown system for stopping or slowing a vehicle by remote means.</p>
---	--	---

Oshkosh Defense Autonomous Unmanned Ground Vehicle (UGV) "TerraMax"	Patent #: RE 43,891; Independent Claim 44	Patent #: RE 43,891; Dependent Claims
<p>U.S. defense contractor Oshkosh Defense autonomous unmanned ground vehicle (UGV) "TerraMax" is now equipped with radar and LIDAR; which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges; uses lasers to detect nearby objects, along with a drive-by-wire system that electronically controls engine speed, transmission, braking, and steering. The system does more than steer and hit the throttle and brakes. It can intelligently control the driveline locks to navigate deep sand or mud, without input from the operator. The "TerraMax" technology has recently completed its first technical assessment (LTA) for the U.S. Marine Corps UGV (CUGV) initiative. The Cargo UGV program is sponsored by the Marine Corps Warfighting Laboratory and the Joint Ground Robotics Enterprise Robotics Technology Consortium.</p>	<p>A vehicles' stall-to-stop system or vehicle slowdown system in signal communication with a pre-programmed automated system is adapted, modified, or designed to control the vehicles' stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>55. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle designed to perform as a driverless or autonomous vehicle for stopping or slowing a vehicle that is in operation with or without a user, driver or operator inside the vehicle.</p>

<p>“TerraMax”: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems.</p>	<p>an electrical system in electrical communication with at least one of a brake, a foot peddle, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>TerraMax, a leading contributor to autonomous vehicle technology, has computer-controlled steering, acceleration, braking and transmission, a new laser scanner offers enhanced sensing abilities and 360° obstacle detection, as well as the ability to reduce the visual signature of the vehicle's sensors so that it can better blend in with military fleets.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot peddle, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>“TerraMax”: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>“TerraMax”, a leading contributor to autonomous vehicle technology, has computer-controlled steering, acceleration, braking and transmission, a new laser scanner offers enhanced sensing abilities and 360° obstacle detection, as well as the ability to reduce the visual signature of the vehicle's sensors so that it can better blend in with military fleets.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal in response to one of the vehicle's operating systems for monitoring the vehicle's condition upon exceeding a pre-programmed vehicle operating system parameter from the pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means such that the speed of the vehicle is initially decreased immediately after activation of the means upon initial receipt of the at least one control signal; and</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>“TerraMax”: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems. “TerraMax”, a leading contributor to autonomous vehicle technology, has computer-controlled steering, acceleration, braking and transmission, a new laser scanner offers enhanced sensing abilities and 360° obstacle detection, as well as the ability to reduce the visual signature of the vehicle’s sensors so that it can better blend in with military fleets.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the radar, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor.</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
--	--	--

Dream Hammer's "Ballista" Software for Computer, Tablet or Smartphone	Patent #: RE 43,891; Independent Claim 44	Patent #: RE 43,891; Dependent Claims
<p>Its first product, Ballista, is an OS for drones and allows one person to simultaneously control multiple drones of any type. It features a plug and play architecture that can be integrated into any unmanned system.</p> <p>Ballista has been licensed to government agencies including the U.S. Navy's Program Executive Office (PEO) Unmanned Aviation and Strike Weapons. Owners of separate systems can share software, which over the long run could save the Defense Department billions of dollars in software costs, officials predict. On July 3, 2013, DreamHammer announced it was partnering with Lockheed Martin to use the company's software for integrated command and control of Lockheed Martin's unmanned aerial vehicles. Lockheed and the Pentagon have worked with DreamHammer to create the software which works with boats, planes or trucks. Ballista open software platform allows for autonomous and simultaneous control. Autonomous and unmanned vehicles involve a transfer of control from direct human input to automated or remote control.</p>	<p>A vehicles' stall-to-stop system or vehicle slowdown system in signal communication with a pre-programmed automated system is adapted, modified, or designed to control the vehicles' stall-to-stop means or vehicle slowdown means, comprising:</p>	<p>55. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 44], further can be adapted, modified or designed to include a vehicle designed to perform as a driverless or autonomous vehicle for stopping or slowing a vehicle that is in operation with or without a user, driver or operator inside the vehicle.</p>

<p>The first step towards an autonomous vehicle is the implementation of a drive-by-wire system: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems. Autonomous Emergency Braking (AEB) is a function which uses radar or LIDAR sensors; detects upcoming obstacles; takes action to prevent a collision.</p>	<p>an electrical system in electrical communication with at least one of a brake, a foot pedal, a radar, a camera, a navigational system, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot pedal, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>DreamHammer's Ballista software has computer-controlled steering, acceleration, braking and transmission; a laser scanner that offers enhanced sensing abilities and obstacle detection. It is designed to military and safety-critical standards, works with all unmanned drones and robots, and can be used to link multiple drones into one master system, all controlled by one person. Ballista is built on an open software platform which allows for autonomous and simultaneous control of multiple unmanned vehicles across all domains-space, air, sea, and land-and can be run from virtually any computer, including a tablet or smartphone.</p>	<p>a computer system in signal transmission communication with at least one of the brake, the foot pedal, the radar, the camera, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor;</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot pedal, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>The first step towards an autonomous vehicle is the implementation of a drive-by-wire system: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems. Autonomous Emergency Braking (AEB) is a function which uses radar or LIDAR sensors; detects upcoming obstacles; takes action to prevent a collision.</p>	<p>a receiver in electrical communication with the electrical system and adapted to receive at least one control signal from a pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
<p>DreamHammer's Ballista software has computer-controlled steering, acceleration, braking and transmission; a laser scanner that offers enhanced sensing abilities and obstacle detection. It is designed to military and safety-critical standards, works with all unmanned drones and robots, and can be used to link multiple drones into one master system, all controlled by one person. Ballista is built on an open software platform which allows for autonomous and simultaneous control of multiple unmanned vehicles across all domains-space, air, sea, and land-and can be run from virtually any computer, including a tablet or smartphone.</p>	<p>a receiver in computer communication with the computer system and adapted to receive at least one control signal in response to one of the vehicle's operating systems for monitoring the vehicle's condition upon exceeding a pre-programmed vehicle operating system parameter from the pre-programmed automated system to activate a stall-to-stop means or vehicle slowdown means such that the speed of the vehicle is initially decreased immediately after activation of the means upon initial receipt of the at least one control signal; and</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>

<p>The first step towards an autonomous vehicle is the implementation of a drive-by-wire system: Drive-by-wire can refer to a number of electronic systems that take the place of old mechanical controls. Instead of using cables, hydraulic pressure, and other things that provide the driver with direct, physical control over the speed or direction of a vehicle, drive-by-wire technology uses electronic controls to activate the brakes, control the steering, and operate other systems.</p> <p>DreamHammer's Ballista software has computer-controlled steering, acceleration, braking and transmission; a laser scanner that offers enhanced sensing abilities and obstacle detection. It works with all unmanned drones and robots, and can link multiple drones into one master system; controlled by one person. Ballista is built on an open software platform which allows for autonomous and simultaneous control of multiple unmanned vehicles across all domains-space, air, sea, and land-and can be run from virtually any computer, including a tablet or smartphone.</p>	<p>wherein the at least one control signal is communicated from the receiver to the electrical system or the computer system to control at least one of the brake, the foot peddle, the radar, the navigational system, the light, the speed control, the ignition system, the steering wheel, the transmission, the fuel system, and the motor.</p>	<p>27. The vehicles' stall-to-stop means or the vehicles' slowdown means [of claim 23], further includes vehicles pre-programmed to automatically activate the stall-to-stop means or vehicle slowdown means when sensors of at least one of; navigation, camera, radar, guidance, motion, distance, weight, height are interconnected to the vehicles onboard electrical system and/or computer system for controlling at least one of a brake, a brake override system, an electronic throttle, a foot peddle, a light, a speed control, an ignition system, a steering wheel, a transmission, a fuel system, and a motor.</p>
---	--	--